

SFA Modernization Partner
United States Department of Education
Student Financial Assistance



Ombudsman March 2000 Report
Analysis Data Summary

Task Order #11
Deliverable #11.1.1

March 31, 2000

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1 Introduction

1.1 Purpose

This deliverable is part of Task Order 11, and is documentation of the work completed to provide a description of the March 2000 Report Analysis Data Summary to the Office of the Ombudsman. This document will outline the methodology (phases) utilized to provide summary OCTS (Ombudsman Case Tracking System) and NSLDS (National Student Loan Data System) as of March 3, 2000 for the Ombudsman.

1.2 Scope

This document covers the following areas:

- Summary of Data Analysis for March 2000 Report
- Data Requirements
- Data Retrieval
- Data Cleansing
- Data Integration
- Graph/Report Generation
- Delivery of Graphs and Data
- Recommendations for Future Data Analyses

2 Summary of Data Analysis for March 2000 Report

The Ombudsman March 2000 Report Analysis Data Summary was generated by the Ombudsman team, consisting of members from the Office of the Ombudsman, CIO, and SFA's Modernization's Partner--Andersen Consulting. This summary is the result of several weeks of work in determining the Ombudsman data requirements, data retrieval, data cleansing, data integration, graph/report generation, and delivery of the graphs and the data.

The main deliverables of the Ombudsman March 2000 Report Analysis Data Summary are Microsoft Excel graphs, which were created via calculations and data integration of OCTS and NSLDS carrot (^) delimited string files from Oracle databases. The following sections of this data analysis describe the methodology (phases) of the Ombudsman team to produce these graphs for the Ombudsman March 2000 Report.

3 Data Requirements

The first phase of the data analysis effort was to determine the desired data to be retrieved or data requirements. This data is key information used in the collection, processing, and reporting of Ombudsman data. OCTS (Ombudsman Case Tracking System) and NSLDS (National Student Loan Data System) were the two source locations of this data.

After several discussion with the Ombudsman team, several fields in OCTS and NSLDS were identified to develop a composite of an Ombudsman case. In particular, the data was divided into the four categories--Case, Steps, Customer, and Loan. The following pages display these categories and their respective fields.

No.	Proposed Ombudsman Report Information	Database	Field Name	Type
Case				
1	Customer Number	OCTS	?	
2	Case Number	OCTS	?	
3	Why did the person call	OCTS	INQUIRY_TYPES	
4	Date case received	OCTS	IN_DATE_RECEIVED	DATE
5	Ombudsman Specialist	OCTS	PE_SPECIALIST	NUMBER(9)
6	Intake Person	OCTS	PE_INTAKE	NUMBER(9)
7	Was the case referred	OCTS	PA_REF_FROM	NUMBER(9)
8	To whom was the case referred	OCTS	PA_REF_TO	NUMBER(9)
9	Account Servicer	OCTS	PA_SERVICER	NUMBER(9)
10	Complaint Against	OCTS	PA_COMPLAINT	NUMBER(9)
11	Primary Complaint	OCTS	?	
12	Secondary Complaint	OCTS	?	
13	Follow Up Date	OCTS	IN_FOLLOW_DATE	DATE
14	Loan Type	OCTS	?	
15	What answer did we give (how was the case resolved)	OCTS	INQUIRY_REASONS_CLOSED	
16	Who called (i.e. student, parent, school, lender, etc.)	OCTS	(Determine from Summary Description Notes)	
17	Did they call back	OCTS	(Calculation of multiple case per customer?)	
18	How did they contact us (i.e. phone, fax, letter, web, etc.)	OCTS	INQUIRY_SOURCES	
19	Complaint Type	OCTS	COMM_METHODS	
20	Date (Case) Closed	OCTS	IN_DATE_CLOSED	DATE
21	Reason Closed	OCTS	IR_REASON_CLOSED	NUMBER(9)
22	Summary Description (Notes)	OCTS	IN_SUMMARY	UNDEFINED
23	Next Steps (Notes)	OCTS	IN_NEXT_STEP	UNDEFINED
24	Closed (Notes)	OCTS	CU_NOTES	UNDEFINED

No.	Proposed Ombudsman Report Information	Database	Field Name	Type
Steps				
1	Customer Number	OCTS	?	
2	Case Number	OCTS	?	
3	Ombudsman Specialist	OCTS	PE_SPECIALIST	NUMBER(9)
4	Intake Person	OCTS	PE_INTAKE	NUMBER(9)
5	Who does the steps (Ombudsman office, lender, etc.)	OCTS	(Group?)	
6	How many steps did it take	OCTS	(Calculate)	
7	What kinds of steps were taken (phone, fax, letters, etc.)	OCTS	IS_IDENTIFIER	NUMBER(9)
8	Length of time to resolve the case from report to closure	OCTS	CO_DATE	DATE
9	Length of time between steps (eventually level of effort)	OCTS	(Calculate)	
10	Source of step (phone, fax, letters, etc.)	OCTS	?	
11	Text field documenting case history	OCTS	Field Name = AGENT?	

No.	Proposed Ombudsman Report Information	Database	Field Name	Type
Customer				
1	Customer Number	OCTS	CUST NUMBER	
2	Social Security Number	OCTS	CU_SSN	VARCHAR2(11)
3	Prefix	OCTS	PR_PREFIX_ABBR	VARCHAR2(4)
4	First Name	OCTS	CU_FIRST_NAME	VARCHAR2(20)
5	MI	OCTS	CU_MIDDLE_INIT	CHAR(1)
6	Last Name	OCTS	CU_LAST_NAME	VARCHAR2(20)
7	Suffix	OCTS	CU_SUFFIX	VARCHAR2(4)
8	Birthdate (MM/DD/YY)	OCTS	CU_BIRTH_DATE	DATE
9	Account Number	OCTS	CU_ACCOUNT	VARCHAR2(50)
10	Home Phone Number	OCTS	CU_HOME_PHONE	VARCHAR2(14)
11	Work Phone Number	OCTS	CU_WORK_PHONE	VARCHAR2(14)
12	Extension	OCTS	CU_WORK_EXT	VARCHAR2(5)
13	Fax Number	OCTS	CU_FAX	VARCHAR2(14)
14	Address	OCTS	CU_ADDRESS	VARCHAR2(50)
15	City	OCTS	CU_CITY	VARCHAR2(50)
16	State	OCTS	US_STATE_CODE	CHAR(2)
17	Country	OCTS	CU_COUNTRY	VARCHAR2(20)
18	Zip Code	OCTS	CU_ZIP_CODE	VARCHAR2(10)
19	Hours Availability (Eastern Time)	OCTS	CU_HOURS_AVAIL	VARCHAR2(20)
20	Email Address	OCTS	CU_EMAIL	VARCHAR2(50)
21	Preferred Contact Method	OCTS	?	
22	Additional Customer Information (Notes)	OCTS	CU_NOTES	UNDEFINED

No.	Proposed Ombudsman Report Information	Database	Field Name	Type
Loan				
1	Loan program (FFEL, DSLP, Perkins)	OCTS	LOAN_TYPES	
2	Separation date	NSLDS		
3	Graduation date	NSLDS		
4	School type (1 yr, 2 yr) and control (private, proprietary, etc.)	NSLDS		
5	Number of years in repayment (age of loan)	NSLDS		
6	Loan holder and/or servicer	NSLDS		
7	Region (based on school location or borrower location?)	NSLDS		
8	Guaranty agency	NSLDS		
9	Loan status (i.e. default, repay, etc.)	NSLDS		
10	Disbursement date	NSLDS		
11	Loan amount (original debt/outstanding balance)	NSLDS		
12	Number of loans	NSLDS		
13	OPE (Office of Post-secondary Education) ID - 8 digits	NSLDS		
14	Default/Non-default/Both (pertains to student)	NSLDS		
15	Delinquent/current (payment status)	NSLDS		
16	In-school, grace, repay (pertains to student payment)	NSLDS		
17	Deferment, forbearance, etc. (pertains to student payment)	NSLDS		
18	Progress in school (is this highest grade level of loan made?)	NSLDS		

4 Data Retrieval

After the desired data was identified, the Ombudsman team performed the data retrieval. The OCTS and NSLDS data resided in Oracle databases. The CIO Ombudsman team members created SQL queries to retrieve the fields identified during the Data Requirements Phase.

4.1 OCTS Data Retrieval

For the OCTS data retrieval, the CIO Ombudsman team members queried the OCTS Oracle database and generated a carrot (^) delimited file. This carrot (^) delimited file was then exported into a Microsoft Excel spreadsheet.

4.2 NSLDS Data Retrieval

For the NSLDS data retrieval, the CIO Ombudsman team members sent their SQL query to another contractor responsible for performing this NSLDS query and later received a carrot (^) delimited file. This carrot (^) delimited file was also exported into a Microsoft Excel spreadsheet.

5 Data Cleansing

After the data was exported into Microsoft Excel, data cleansing was necessary to promote the creation of reports/graphs generated from data with integrity.

5.1 OCTS Data Cleansing

Due to problems with the current Ombudsman Case Tracking System, duplicate records were often created. For example, the current OCTS created the following scenarios, where a separate record was created for each of the following:

- Record populated with only a customer's First Name.
- Record populated with only a customer's Last Name.
- Record populated with only a customer's Social Security Number.
- Record populated with only a customer's Work Telephone Number.

Consequently, for the purposes of the Ombudsman March 2000 Report data analysis, these duplicate records were removed from the data set.

5.2 NSLDS Data Cleansing

The NSLDS data needed to be cleansed as well to eliminate the reporting of duplicate loan information. In particular, duplicate loan records, where the same loan information applied to two different schools because a student changed schools while maintaining the same loan, were removed from the data set.

6 Data Integration

In order to generate a composite record of a customer/student, the OCTS data was integrated with the NSLDS data. In order to accomplish this, a customer's Social Security Number (SSN) in NSLDS was matched with the Ombudsman Case Number and SSN in OCTS. This data integration also matched respective Ombudsman case information (such as Case Types of General Assistance, Inquiry, Problem, and Complaint) from OCTS with the corresponding loan information from NSLDS. This information was later utilized to generate graphs and reports for the March 2000 Report.

7 Graph/Report Generation

Based on the OCTS and NSLDS data collected, the following OCTS and NSLDS graphs were generated in Microsoft Excel.

Please note:

The first iteration of reports was categorized by the following Case Types:

- General Assistance
- Inquiry
- Problem
- Inquiry

The second iteration of reports was categorized by the following Case Types:

- General Assistance (General Assistance and Inquiry)
- Problem Assistance (Inquiry and Complaint)

7.1 OCTS Graphs

- Age of Customers
 - Count
 - Percentage
- Loan Type in OCTS
- Case Type
- Primary and Secondary Case Complaint
- Number of Business Days from Case Opened to Case Closed
 - Count
 - Percentage
- Number of Business Days from Case Opened to Case Closed
 - Percentage for all Case Types
- Number of Contacts Per Case
 - Count
 - Percentage
- Number of Contacts Per Case
 - Percentage for all Case Types
- Number of Business Days Between Contacts
 - Count
 - Percentage
- Number of Business Days Between Contacts
 - Percentage for all Case Types
- Method of Contact
 - Count for all Case Types

7.2 NSLDS Graphs

- Loan Status by Case Type
Count
- Years in Repayment by Case Type
Count
- Types of Loans by Case Type
Count
- Number of Loans by Case Type
Count
- Loan Amounts by Case Type
Count
- School Type & Control by Case Type
Count

7.3 Final Graphs

After reviewing the above graphs, the Ombudsman team along with Fred Sellers requested and later received the following graphs.

- Graph 1 – Client Reported Issues – General Assistance
- Graph 2 – Client Reported Issues – Problem Assistance
- Graph 3 – Case Type
- Graph 4 – Number of Business Days Case Opened to Case Closed
- Graph 5 – Average Number of Contacts Per Case
- Graph 6 – Loan Status by Case Type
- Graph 7 – Type of Loan by Case Type
- Graph 8 – School Type & Control by Case Type

8 Delivery of Graphs and Data

After the creation of the graphs described in the previous Graph/Report Generation Phase, these graphs were delivered and discussed by the Ombudsman team. In particular, printouts and electronic copies of the graphs were delivered to: Debra Wiley, Dottie Kingsley, Joyce DeMoss, Chris Hill, Vincent Ferrer, and Fred Sellers.

The original data for the graphs reside in two Microsoft Excel spreadsheets—OCTS Data Analysis.xls and NSLDS Data Analysis.xls. These spreadsheets contain the original download of carrot (^) delimited files from the Oracle databases as well as several calculations to generate the graphs.

The final data and graphs reside in eight individual Microsoft Excel spreadsheets:

- Graph 1 – Client Reported Issues – General Assistance.xls
- Graph 2 – Client Reported Issues – Problem Assistance.xls
- Graph 3 – Case Type.xls
- Graph 4 – Number of Business Days Case Opened to Case Closed.xls
- Graph 5 – Average Number of Contacts Per Case.xls
- Graph 6 – Loan Status by Case Type.xls
- Graph 7 – Type of Loan by Case Type.xls
- Graph 8 – School Type & Control by Case Type.xls

9 Recommendations for Future Data Analyses

Based on the methodology (phases) executed to generate the Ombudsman March 2000 Report Analysis Data Summary, several recommendations are suggested for future data analyses efforts. These recommendations promote the use of a centralized Customer Relationship Management (CRM) tool to record, track, and report customer information and customer activity as well as corresponding activities performed by the Office of the Ombudsman. The recommendations are:

1. Integrate OCTS data and pertinent NSLDS data for each case in one central location or database.

Due to the laborious and complex effort involved in integrating OCTS and NSLDS data, both OCTS and NSLDS data should be captured and stored in one central repository. Please note that this recommendation assumes that only the pertinent NSLDS case data should be stored with the OCTS data. In other words, there are several NSLDS data elements, which are not pertinent for this data analysis effort.

Further, customer and case information in OCTS should directly correspond with loan information in NSLDS. This can be achieved by categorizing both OCTS and NSLDS data by key fields such as Social Security Number (SSN). This recommendation would reduce the amount of time and effort to perform queries and reporting.

2. Better categorize data by creating additional, meaningful fields.

The current OCTS and NSLDS data is captured into several fields, most of which are documented in Section 3: Data Requirements of this document. However, with an anticipated increase in the number of customers handled by the Office of the Ombudsman and future use of new telephony and internet technologies to capture incoming data, it is recommended that the data be captured and categorized by creating additional, meaningful fields. Some of these fields may include (but are not limited to): to and from name information (i.e. who called, who received a call), what media was used to contact the customer (i.e. customer called Ombudsman Specialist on telephone, Ombudsman Specialist e-mailed customer), etc.

3. Promote ad-hoc reporting as opposed to reporting which may take hours, days, or weeks to perform.

As evidence by this March 2000 Report data analysis effort, it is currently time-consuming to collect, process, and graph/report on the existing Ombudsman case data in OCTS and NSLDS. However, after a new CRM tool has been

implemented at the Office at the Ombudsman, reporting should be able to be performed in minutes as opposed to hours, days, or weeks.